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Sterne Kessler Goldstein & Fox PLLC
Attorneys At Law
1100 New York Avenue NW
Suite 600
Washington, DC 20005-3934

EXAMINER	
SCHLAPKOHL, WALTER	

ART UNIT	PAPER NUMBER
1636	

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/705,940	FIKE, RICHARD M.	
	Examiner	Art Unit	
	Walter Schlapkohl	1636	waf

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-10,15,16,22-29,31-34 and 36-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,15,16,22-29,31-34 and 36-49* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

The Examiner of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Walter Schlapkohl whose contact information and availability can be found at the end of the instant action.

Receipt is acknowledged of the papers filed 3/16/2006 in which claims 1-5, 9-10, 15 and 28-29 were amended and claims 45-84 were added. Claims 1-10, 15-16, 22-29, 31-34 and 36-84 are pending. Claims 1-10, 15-16, 22-29, 31-34 and 36-49 are under examination in the instant Office Action.

Any rejection of record in the previous Office Action mailed 9/16/2005 that is not addressed herein has been withdrawn.

Election/Restrictions

Newly submitted claims 50-84 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: in the response to the restriction requirement mailed 2/26/2002, Applicant elected Group I, drawn to a method for producing an automatically pH-adjusting dry powder culture medium, said medium, a method of cultivating a cell using said medium, kits for cultivating a cell and compositions comprising said medium and cells. New

claims 50-84 are drawn to an automatically pH-adjusting agglomerated mammalian cell culture medium.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 50-84 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

Claim 28 is objected to because of the following informalities: claim 28 recites "[a] kit for culturing a eukaryotic cell, comprising one or more containers containing an automatically pH-adjusting eukaryotic dry powder culture medium prepared according to the method of claim 1 claims1," in lines 1-3. It appears that claim 28 should instead recite "[a] kit for culturing a eukaryotic cell, comprising one or more containers containing an automatically pH-adjusting eukaryotic dry powder culture medium prepared according to the method of claim 1 ~~claims1,~~."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 47 and 49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. **This is a new matter rejection.**

The specification as originally filed does not provide support for the invention as now claimed: a method for producing an automatically pH-adjusting eukaryotic dry powder culture medium comprising "storing the dry powder culture medium at about 20°C to about 25°C" (claim 47) and such a method wherein "at least one buffering salt is in the reconstituted media at a concentration selected from about 0.1 mM to about 10 mM, from about 0.2 mM to about 9 mM, from about 0.3 mM to about 8.5 mM, from about 0.4 mM to about 8mM, from about 0.5 mM to about 7.5

mM, from about 0.6 mM to about 7 mM, and from about 0.7 mM to about 7 mM" (claim 49). The specification does not provide sufficient blazemarks nor direction for the ranges encompassed by the above-mentioned limitations, as currently recited. The instant claims now recite limitations, which were not clearly disclosed in the specification as filed, and now change the scope of the instant disclosure as filed. The specification, for example, recites storage of the packaged media at "temperatures of less than about 20-25°C" (see, e.g., page 37, lines 18-25). The specification also recites that "mono- and dibasic phosphate salts are used at concentrations of about 0.1 mM to about 10 mM, from about 0.2 mM to about 9 mM, from about 0.3 mM to about 8.5 mM, from about 0.4 mM to about 8mM, from about 0.5 mM to about 7.5 mM, from about 0.6 mM to about 7 mM, and from about 0.7 mM to about 7 mM" (see, e.g., page 24, lines 5-9). Such limitations recited in the present claims, which did not appear in the specification as filed, introduce new concepts and violate the description requirement of the first paragraph of 35 U.S.C. 112.

Claims 1-10, 15-16, 22-29, 31-34, 36-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. **This is a new rejection not necessitated by Applicant's amendment.**

The claims are drawn to a method for producing an automatically pH-adjusting eukaryotic dry powder culture medium, said medium, a method of cultivating a cell using said medium, kits for cultivating a cell and compositions comprising said medium and cells. The claims encompass any method for producing an automatically pH-adjusting dry powder culture medium, wherein any two or more buffer salts are added and wherein the dry powder medium is reconstituted with any solvent such that an automatically pH-adjusting eukaryotic dry powder culture medium is produced. Some claims are further drawn to such methods/media wherein the buffer salts are monobasic and dibasic sodium or potassium phosphate salts. Some claims are further drawn to such a methods/media wherein the solvent is water (deionized or distilled), serum (bovine, human or fetal bovine) or an organic solvent (DMSO, acetone, ethanol). Applicant has defined "culture medium" to "refer to a nutritive solution that supports the cultivation and/or growth of cells" (see instant specification at page 15, lines 29-31). The claims, however, do

not provide any structural or biochemical information with regard to the buffer salts and/or solvents which can be used in a culture medium such that the culture medium is a nutritive solution that supports the cultivation and/or growth of cells and such that the dry powder media is automatically pH-adjusting. Thus, the rejected claims comprise a set methods for producing eukaryotic dry powder media and said media, all of which are defined by the function of the produced media.

To provide adequate written description and evidence of possession of a claimed genus, the specification must provide sufficient distinguishing identifying characteristics of the genus. The factors to be considered include disclosure of a complete or partial structure, physical and/or chemical properties, functional characteristics, structure/function correlation, and any combination thereof. The specification describes phosphate buffered saline powders and Tris-buffered saline powders (page 8, lines 24-26). Example 2 of the specification describes the addition of sodium bicarbonate as a buffering salt (see, e.g., page 49). Example 17 describes the use of phosphate salts and sodium bicarbonate in conjunction with water as the solvent for reconstituting the dry powder in order to prepare an automatically pH-adjusting culture medium (see page 70-71). No description is provided of a single

eukaryotic dry culture medium in which a solvent other than water is used to reconstitute the dry medium such that the pH is automatically adjusted to a desired point or range.

Even if one accepts that the examples described in the specification meet the claim limitations of the rejected claims with regard to structure and function and chemical properties, the examples are only representative of one solvent used in conjunction with a few different buffer salts. The results are not necessarily predictive of any other solvents used in combination with any set of buffer salts such that a dry culture medium can be produced which "supports the cultivation and/or growth of cells." Thus, it is impossible to extrapolate from the example described herein those nucleic acid molecules that would necessarily meet the structural/functional characteristics of the rejected claims, especially in light of the fact that Applicant indicates that organic solvents such as acetone and DMSO could be used when such solvents would clearly NOT support the cultivation and growth of cells.

The prior art does not appear to offset the deficiencies of the instant specification in that it does not describe a set methods for producing eukaryotic dry powder media and said media, such that any buffer salts can be used with any solvent

to produced a medium which is automatically pH-adjusting and which "supports the cultivation and/or growth of cells."

Given the very large genus of buffer salts and solvents encompassed by the rejected claims, and given the limited description provided by the prior art and specification with regard to which buffer salts can be used in combination with which solvents, the skilled artisan would not have been able to describe the broadly claimed genus of methods for producing eukaryotic dry powder media and said media, such that any buffer salt can be used with any solvent to produced a medium which is automatically pH-adjusting and which "supports the cultivation and/or growth of cells." Thus, there is no structural/functional/chemical basis provided by the prior art or instant specification for one of skill in the art to envision those methods/media that satisfy the functional limitations of the claims. Therefore, the skilled artisan would have reasonably concluded applicants were not in possession of the claimed invention for claims 1-10, 15-16, 22-29, 31-34, 36-49.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-16, 22-27 & 44-45, and therefore dependent claims 40-43, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **This is a new rejection not necessitated by Applicant's amendment.**

Claim 15 recites the phrase "contacting said eukaryotic cell with said solution under conditions favoring cultivation of the cell" in lines 4-5. Claim 15 is vague and indefinite in that the metes and bounds of the phrase "under conditions favoring cultivation of the cell" are unclear. Does Applicant intend to encompass any conditions under which the cells can be maintained or even viably frozen, or does Applicant intend a more narrow set of embodiments in which the conditions allow for, e.g., log phase growth?

Similarly, claim 16 recites the phrase "under conditions favoring cultivation of the cell" in lines 3-4. Claim 16 is vague and indefinite in that the metes and bounds of the phrase "under conditions favoring cultivation of the cell" are unclear as explained above.

Claims 22-23 recite the phrase "wherein said eukaryotic cell is a yeast cell, a plant cell, or a cell line derived therefrom." Claims 22-23 are vague and indefinite in that the metes and bounds of "a cell line derived therefrom" are unclear. What structural features or phenotypic or genotypic characteristics would be used as criteria for determining such a cell line? What steps are involved in the deriving?

Similarly, claims 24-27 and 44-45 refer to eukaryotic, mammalian or animal cells or cell lines "derived therefrom." Claims 24-27 are vague and indefinite in that the metes and bounds of "a cell line derived therefrom" are unclear as explained above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-8, 10, 15-16, 22-29, 31-34, 36-41 and 44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by SIGMA catalog 1994 (of record). **This rejection is maintained**

for reasons of record but has been slightly altered in order to accommodate Applicant's amendment.

SIGMA teaches the construction of several powdered media formulations, including BGJ_b medium (see the top of the left column of page 13) and F-12 Coon's Modification medium (see, e.g., the bottom of the right column of page 15). The formulations/methods for making these media are presented on page 217 and 221 of the SIGMA reference, respectively.

In the case of the BGJ_b medium, the ratio of sodium phosphate dibasic and sodium phosphate monobasic salts are determined to give a pH of 6.2 upon reconstitution when no sodium bicarbonate has been added and to give a pH of 7.4 when 3.5 g/L of sodium bicarbonate have been added (see the formulation on page 217). The medium also includes several additional components, including D-glucose (carbon source), vitamins and other culture medium supplements. The powdered medium can be reconstituted in a solvent such as water. The culture medium is capable of supporting the growth of eukaryotic cells, such as embryonic cartilaginous bone cells (see the introductory paragraph at the top of the page); this also represents a method for culturing eukaryotic host cells using the reconstituted BGJ_b medium. Furthermore, absent evidence to the contrary and given that the medium contains all components

that are capable of supporting the growth of a yeast cell (such as a carbon source and nitrogen source), and given the propensity of microorganisms to contaminate cell culture systems, this medium is also capable of supporting the growth of yeast cells.

Similarly, in the case of F-12 Coon's Modification medium, the ratio of sodium phosphate dibasic and potassium phosphate monobasic salts are determined to give a pH of 5.7 upon reconstitution when no sodium bicarbonate has been added and to give a pH of 7.5 when 2.676 g/L of sodium bicarbonate has been added to the dry powder medium (see the formulation on page 221). The medium also includes several additional components, including D-glucose (carbon source), vitamins and other culture medium supplements (ibid). The powdered medium can be reconstituted in solvent such as water. Importantly, the culture medium is capable of supporting the growth of eukaryotic cells, such as hybrid cells produced by viral fusion (see the introductory paragraph at the top of the page); this also represents a method for culturing eukaryotic host cells using the reconstituted F-12 Coon's Modification medium. Furthermore, absent evidence to the contrary and given that the medium contains all the components that are capable of supporting the growth of a yeast cell (such as a carbon source and nitrogen

source), and given the propensity of microorganisms to contaminate cell culture systems, this medium is also capable of supporting the growth of yeast cells.

Response to Arguments

Applicant argues that the SIGMA reference does not anticipate the instant claims because the SIGMA reference does not teach an automatically pH-adjusting dry powder because the media taught by SIGMA requires the addition of sodium bicarbonate to obtain a final pH of 7.4 and 7.5, respectively. Applicant further argues that the SIGMA reference states that both culture media are "[w]ithout sodium bicarbonate" (pages 13, 15, 217, and 221), and further, that because the SIGMA reference does not teach a dry powder culture medium containing sodium bicarbonate, the SIGMA reference does not anticipate the claims.

Applicant's arguments have been carefully considered and are respectfully found unpersuasive for the following reasons. The SIGMA reference does, in fact, teach a dry powder media comprising sodium bicarbonate. As explained above, both the BGJ_b medium and the F-12 Coon's Modification medium are taught by the SIGMA reference in variations with and without sodium bicarbonate. SIGMA did not sell the cited media comprising sodium bicarbonate in 1994, but the SIGMA reference does teach a

dry powder media comprising sodium bicarbonate. Furthermore, Applicant is invited to show Examiner where in the SIGMA reference it is taught that the addition of sodium bicarbonate is added to obtain a final pH of 7.4 and 7.5, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10, 15-16, 22-29, 31-34 and 36-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over SIGMA (of record) in view of Fike et al (WO 98/36051; of record). **This rejection is maintained for reasons of record but has been slightly altered in order to accommodate Applicant's amendment.**

SIGMA teaches all of the elements set forth above. Briefly, SIGMA teaches the construction of powdered culture media capable of supporting the growth of various eukaryotic cells upon reconstitution in a solvent such as water. Importantly, the construction of the various media set forth in SIGMA involve the determination of a ratio between monobasic and dibasic phosphate salts which give a desired pH upon reconstitution of the powder.

SIGMA does not teach (a) the sterilization of the powder medium, (b) the use of non-CO_2 liberating sodium bicarbonate or (c) the supplementation of the medium with serum.

Fike et al teach a method for producing a nutritive media comprising media supplements and buffers in a dry powder, followed by sterilization of the powder with gamma-rays and packaging of the powder (see, for example, page 6, lines 9-19).

The media can be yeast media, plant culture media or animal cell culture media (see, e.g., page 6, lines 21-23). Supplements for the media include powdered sera from animals, plants, etc., cytokines and growth factors, other proteins, vitamins, amino acids, co-factors, lipids, extracts of animal tissues or glands, and buffers (see, for example, page 6, line 25 to page 7, line 26). Upon reconstitution of the dry powder in a solvent of interest, the media automatically adjusts to a particular pH without the use of a pH-adjusting agent such as an acid or a base (see, e.g., page 20, lines 3-26). Fike et al also teach methods of using the media to culture cells (yeast, animal, etc.), comprising reconstituting the media compositions of the above method in a solvent such as water or serum and contacting cells with the solution under conditions that are favorable for growth of the cell (see, e.g., page 8, lines 22-26). Fike et al also teach kits for use in the above process of culturing cells comprising packaging the media, and in some embodiments including the dried cells for culturing (see, e.g., page 8, lines 6-11). Fike et al must have used sodium bicarbonate that does not liberate CO_2 because the invention as taught by Fike et al could not be practiced if carbon dioxide was liberated in the packaged media. The accumulation of carbon dioxide in an enclosed package would result in a build up of pressure,

eventually leading to "pillowing" and/or an explosion of the container, thereby compromising the sterility of the dry powder.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine the teachings of SIGMA with those of Fike et al because both SIGMA and Fike et al teach a method of preparing a medium that has a desired pH upon reconstitution with a solvent. Furthermore, the SIGMA reference teaches a method of obtaining a desired pH without using extraneous pH-adjusting agents such as HCl or NaOH; this is in accordance with the suggestion in Fike et al that extraneous pH-adjusting agents be omitted from the media preparations.

One of ordinary skill in the art would have been motivated to combine the teachings of the SIGMA reference and of Fike et al because SIGMA teaches that the use of appropriate concentration of pH-opposing salts is a well-known and accepted manner of maintaining the pH of culture medium, while at the same time meeting the suggestion of Fike et al to not use additional pH-adjusting agents.

Based upon the teachings of the cited references, the high skill of one of ordinary skill in the art, and absent evidence to the contrary, there would have been a reasonable expectation

of success to result when combining the methods taught by the SIGMA reference and Fike et al.

Response to Arguments

Applicant argues that claim 1, as amended, is directed to "wherein the dry powder culture medium comprises sodium bicarbonate," and that the SIGMA reference does not describe or suggest such a dry powder comprising sodium bicarbonate. Applicant further argues that Fike et al do not disclose the use of pH-opposing forms of buffer salts in dry powder media. As a result, Applicant argues, the references alone or in combination do not suggest a method of producing a dry powder media comprising both pH-opposing forms of buffer salts and sodium bicarbonate, wherein upon reconstitution the medium has the desired pH.

Applicant's arguments have been carefully considered and are respectfully found unpersuasive for the following reasons. As already explained above, the SIGMA reference does indeed teach a dry powder medium comprising sodium bicarbonate. Whether or not Fike et al explicitly teach pH-opposing forms of buffer salts is not relevant to the rejection of the claims under 35 U.S.C. §103 insofar as the rejection is not predicated upon whether Fike et al teach pH-opposing forms of buffer salts;

the SIGMA reference teaches pH-opposing buffer salts and therefore the Fike et al reference need not provide this limitation. Therefore, both the teachings of the SIGMA reference alone, and the teachings of the SIGMA reference in combination with those of Fike et al, anticipate a method of producing a dry powder media comprising both pH-opposing forms of buffer salts and sodium bicarbonate, wherein upon reconstitution the medium has the desired pH.

Conclusion

No claims are allowed.

Certain papers related to this application may be submitted to the Art Unit 1636 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). The official fax telephone number for the Group is (571) 273-8300. Note: If Applicant *does* submit a paper by fax, the original signed copy should be retained by Applicant or Applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent applications to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at (800) 786-9199.

Any inquiry concerning rejections or objections in this communication or earlier communications from the examiner should be directed to Walter Schlapkohl whose telephone number is (571) 272-4439. The examiner can normally be reached on Monday through Thursday from 8:30 AM to 6:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel can be reached at (571) 272-0781.

Walter A. Schlapkohl, Ph.D.
Patent Examiner
Art Unit 1636

May 24, 2006

NANCY VOGEL
PRIMARY EXAMINER